

DURAPOL™

THERMOPLASTIC COATINGS

DURAPOL™ is a high-performance thermoplastic copolymer coating engineered as a durable alternative to nylon. Formulated with specialized copolymers for increased durometer, it delivers strong adhesion in a single coat. To optimize hardness and mechanical properties, the coating requires an annealing process after post-heat cooling, a step made essential by its unique chemistry. DURAPOL™ provides a premium, cost-effective alternative to nylon-based coatings, enhancing product lifespan and durability.



OVERVIEW

Functional Copolymer Thermoplastic Coatings.

DURAPOL™ powders are engineered using technology that withstands harsh chemical and heat exposure, while furnishing remarkable hardness properties. The salt spray resistance of all properly applied DURAPOL™ co-polymer powder coatings is excellent. A zinc or iron phosphate substrate, sandblasted and coated with the above product, will

provide a durable finish that shows no effect after 2,000 hours of exposure to salt spray. DURAPOL™ powders are a high-end application solution that provides significant economic benefits compared to nylon-based products. It is also available in custom colors and metallic finishes.

MAIN FEATURES

- **Functional** – practical, high-performance protection for industrial use.
- **Excellent Corrosion and Chemical Resistance** – Strong barrier against rust, moisture, and chemicals.
- **High Adhesion** – bonds well to prepared surfaces, often without primer.
- **Excellent Heat Resistance** – withstands high temperatures without degrading.
- **High Durometer** – hard, durable surface with dimensional stability.
- **Withstands Autoclaving** – maintains performance under steam sterilization.
- **Available in Multiple Colors and Finishes** – customizable for appearance and functional marking.
- **Single-Coat Application** – provides complete protection in a single layer.

TYPICAL APPLICATIONS

DURAPOL™ functional copolymer thermoplastic coatings are engineered for durability and performance across a wide range of uses. In consumer goods and appliances, DURAPOL™ provides a smooth, resilient finish ideal for wire shelving, racks, and household hardware. In the transportation sector, it delivers long-lasting protection for underbody parts, fasteners, brackets, and structural components—ensuring resistance to corrosion, impact, and harsh conditions.

- **Consumer Goods & Appliances** – Wire shelving, baskets, appliance racks, hardware components, closet organizers
- **Livestock Equipment** - Animal cages



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TECHNICAL PROPERTIES

Essential technical details are outlined below. Full Technical Data Sheet (TDS) available upon request.

TYPE	METHOD	RESULT
RECOMMENDED THICKNESS	ASTM D6132	8 mils (203 micron) - 12 mils (305 micron)
GLOSS	ASTM D523	70 ± 5
HARDNESS	ASTM D2240	Shore D 80 ± 5
TENSILE STRENGTH	ASTM D638	2600 psi (18 MPa)
ELONGATION (%)	ASTM D638	240%
TABER ABRASION	ASTM D4060	1000 Cycles - 12.6mg loss, CS10 wheel & 10.8mg loss, CS17 wheel
BRITTLINESS TEMPERATURE		-108 °F (-78 °C)
FLEXIBILITY	ASTM D522	1/8 in (3.2 mm), no cracks (>32%) (Conical Mandrel)
SALT SPRAY	ASTM B117	2000 hrs. No significant under cut or creep 2000
QUV	ASTM G53	hrs, No significant change in color or gloss.
HUMIDITY RESISTANCE	ASTM D2247	No blistering or loss of gloss after 1000 hours.
SPECIFIC GRAVITY		1.11
ADHESION		>1000 psi

SOLUTIONS

Durapol™ functional copolymer thermoplastic coatings are tailored to meet the performance demands of diverse industry sectors, from consumer goods and appliances to transportation and beyond. Explore our solutions to find the right fit for your specific application, with coatings engineered for durability, corrosion resistance, and long-term protection.

SUPPORT

To ensure the life of your asset is maximized, a simple and regular maintenance program should be implemented.

At The Protech Group, we prioritize your satisfaction and success. That's why we offer free support, even when challenges arise. From cleaning and phosphating all the way to the final cured film appearance, our experts are dedicated to assisting you every step of the way with proven solutions you can trust.

FORMULATING THE RIGHT MIX.

Since 1976, the Protech Group has been developing and manufacturing coatings, paints, and specialty materials. Through quality and innovation, we formulate the right mix to protect and enhance what matters most to our customers. Protech Group products are manufactured in more than 20 sites worldwide. We serve our customers in countless markets and industries, including construction, infrastructure, transportation, consumer goods, and healthcare.



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